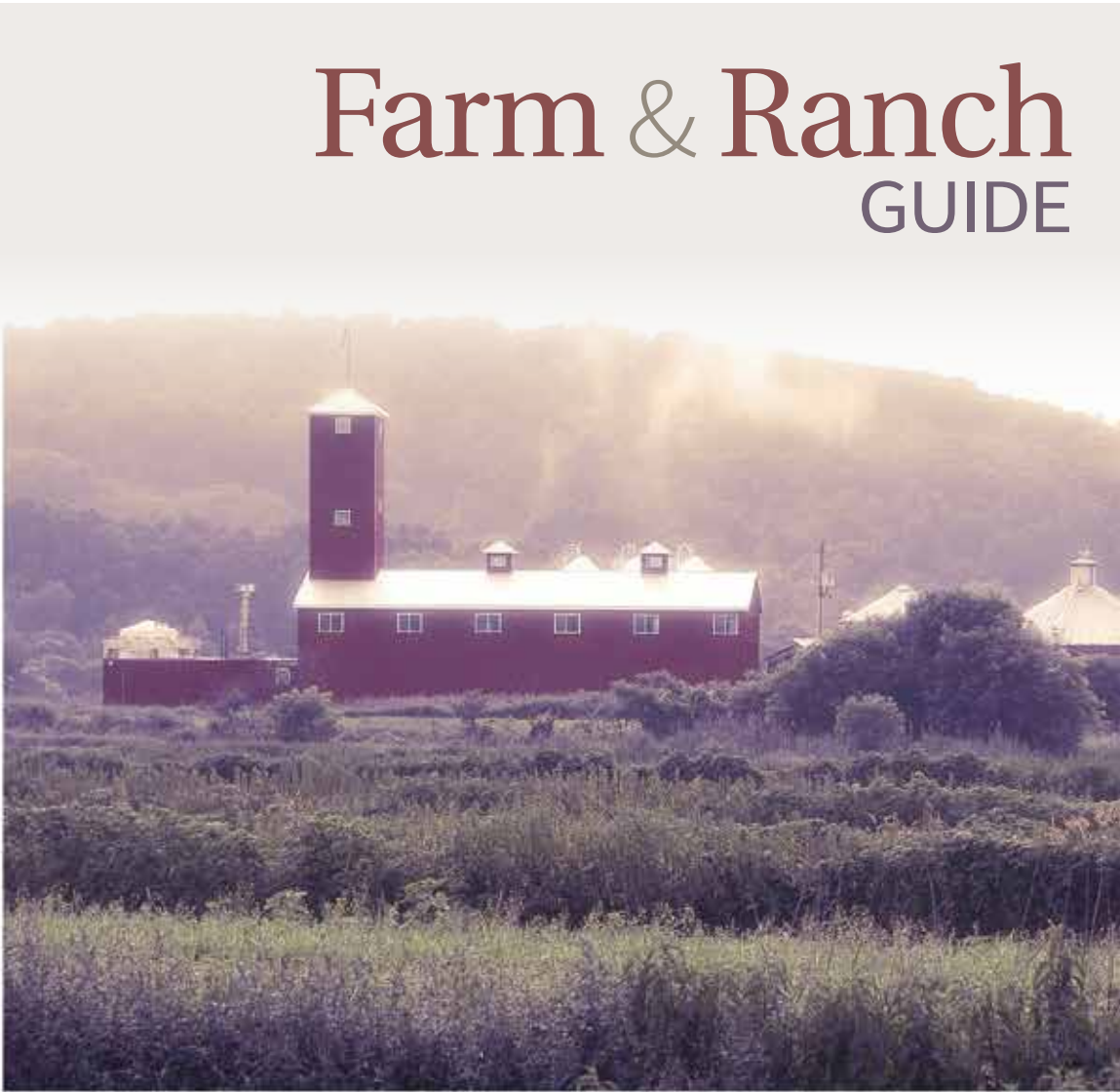




# Farm & Ranch

GUIDE



# FSA Guaranteed Loans

Whether you are beginning the wholesome journey of farming or are already established, you will likely face the need for financial assistance at some point.

Under the United States Department of Agriculture, the Farm Service Agency ensures family farmers and ranchers have access to reasonable terms to maintain their farms.

Farmers operate under strict timelines often disrupted by weather or unforeseen problems. While the FSA can't hinder the rain or frost, other minor nuances can be easily managed with its loaning capabilities.

## WHEN TO REQUEST FSA LOAN

Farming comes with major expenses — some that you may not be prepared to endure. The FSA is here to keep farmers afloat when things go wrong, making certain that operations can continue. Here are some of the reasons you may consider an FSA loan, per the National Farmers Union:

**Operation loans:** When a major piece of equipment requires repairs during the middle of the busy farming season, it can make or break a season. This specific type of



loan helps farmers and ranchers afford daily expenses that are essential to successful operation. Items included can be equipment, fertilizer, seed, livestock or supplies.

**Ownership loans:** A lot of capital is required to run a proficient family farm or ranch. This loan doesn't require previous farm ownership or even a down payment. Many new farmers can get a

great start in the industry thanks to this loan program.

**Microloans:** A borrowing program that suits the size of an operation, new farmers can secure the right amount of capital without surmounting a large debt.

## HOW TO QUALIFY

One major qualification required to be considered for an FSA Guaranteed Loan is

operating under the classification of “family farm.” The group will determine this based on if labor and management teams are mostly family members.

While outside help is allowable — including consultants and advisors — the primary decision-maker must be a part of the family.

Other qualifications include:

- Citizen of the United States;
- An acceptable credit history;
- Unable to obtain a loan without an FSA guarantee;
- Owner-operator of a family farm; and
- Not be delinquent on any federal debt.

To find an agent near you, contact your local agricultural department for a referral.

# Preparing For Spring

In most regions, spring marks the beginning of the busy farming season. Fields are growing and livestock is thriving. Is your operation ready to perform at its peak?

While it may not be every farmer's favorite part of the industry, it's important to make sure your financial books are in as good condition as the rest of your equipment.

Before the season takes off, be sure to complete tax returns, follow up on any invoices which require attention and nail down contract terms with suppliers.

Once your books are ready — get outside and analyze the rest of your property.

## INSPECT PROPERTY FOR WINTER WEAR

Winter weather can wreak havoc on improperly stored equipment or the structures that may have developed damage from snow and ice. Take a trip around the perimeter of your property and note any repairs crucial to the successful operation of your farm or ranch.

When inspecting your property items, you'll want to look for degradation in property's fences, animal housing and even machines.

If major repairs are necessary, it's easy to save your already limited time by calling in a local professional. Remember that agricultural mechanics will be sparse when the season gets started, so preparing for service early is best.



## GENERAL MAINTENANCE ON EQUIPMENT

Performing general maintenance on the hard-working machines you rely on can be the difference in a successful season or one hindered with break downs.

After the long winter, give your machines attention before putting them back to work.

Hopefully, you have ample room to keep your equipment indoors – if not, rust and early deterioration is a common problem throughout the cold

months. If room is an issue, you can still prevent these issues by using heavy-duty tarps when winter returns.

Aside from general oil and filter changes to the engines on your farm, you'll also benefit from inspecting planters, removing crop residue and lubricating moving parts on your intricate machines.

## SPRING CLEANING ON THE FARM

While cleaning a farm is a bit differ-

ent (and smellier) than conventional spring cleaning, it is crucial in retaining the integrity of your livestock and property.

Monitor your land for downed trees or other hazards that occurred during the winter before you begin planting crops.

Your livestock may have been cooped up in their housing while the weather was cold. Once the weather warms, get them out to pasture and thoroughly clean the mess they left behind.

# Farm Equipment Safety

**F**arming certainly comes with risks and rewards. Understanding the great power of the machines you rely on can keep everyone who operates them safe.

According to the National Institute for Occupational Safety and Health, agriculture ranks among the most hazardous industries in America. It reports that 401 farmers and farm workers died from work-related injuries in 2015. The leading cause was tractor overturns but there are other significant risks posed to you and your team.

As owner and operator, it's your responsibility to keep those working for you out of harm's way. Get in touch with the equipment your farm or ranch counts on this spring.

## UNDERSTANDING THE PTO

The Power Take-Off shaft is one of the most relied on components of agricultural equipment. Developed in North America in the 1930s, the PTO is used to transfer mechanical power of tractors to implements.

As effective as they are, the National Farmers Union says they can also be the most persistent hazards associated with equipment.

Keep these safety tips in mind when around a rotating PTO:

**Stay away:** Operators should never reach across a working PTO. Some shafts may feature shields but the risk of getting a body part entangled is still high.

**No loose-fitting clothing:** Baggy sleeves or shirt tails can get easily



become wrapped in a PTO if an operator is too close. This will result in someone being pulled in, causing severe injury or death.

**Disengage PTO:** Before leaving a tractor, it is crucial to disengage the PTO and turn off the engine before removing the seat.

## ATV TIPS

Many farmers rely on the maneuverability of small ATVs to quickly travel their farms. They are commonly

used to monitor fence lines, livestock and even irrigation systems that may require attention. They are also another hazardous machine that must be driven with great care and attention.

Remember to ride alone if possible. A farm's rough terrain can already make steering and control difficult, the weight of a passenger will make it even more challenging.

Equip your ATV with lights, reflectors and flags. Because they are so low to the ground, extra visibility is crucial

to the larger vehicles around you.

## ROLL-OVER PROTECTION

To lessen the injuries experienced in a tractor rollover, older tractors can be equipped with roll-over protection kits.

These kits can sometimes be more expensive than a classic machine but it is nowhere near the cost of a life lost due to a tragic accident. Talk with a local ag shop to see your options for outfitting your equipment today.

# Protecting Children

One of the greatest ways to teach your child about responsibility is by providing them with a role in a family farm's success. It paints a clear picture of how the earth gives back and why it's important to protect and influence the process.

While this rewarding experience will provide many benefits to children, there are important safety measures to instill and enforce. Kids can easily be enticed to explore large equipment, engage with livestock or navigate the land — both of which can result in disastrous results.

Be firm with your expectations for how your children should act while on the farm. It can be the difference in a tragedy or developing a responsible member of your family and team.

## WHERE THE HAZARDS LIE

Farms are typically filled with potentially hazardous factors, but with safety in mind most can be avoided. While teaching your child about responsibility and pride, keep the following age-related risks from the National Ag Safety Database in mind.

### Toddler/Preschool

At this age, children should only monitor farming activity. Due to their fascination by moving parts and curiosity, falling off farm equipment, engaging with poisonous chemicals or drowning are major risks.

### Ages 5-9

Your child is now likely looking to



impress the adults around them, however they are still not realistically aware of dangers. Keep a close eye on them as this age group is prone to livestock kicks or crushing and becoming entangled in moving machinery.

### Ages 10-13

As children develop into teenagers, their desire to be more of an individual may cause them to perform chores without adult supervision. While they may seem mature enough, it is still cru-

cial to accompany them on machinery designed for adults and supervise them as they navigate buildings and the farm land.

### Ages 13-16

At this point, your child is gaining a good grasp on behavior on the farm. However, they also may be apt to experiment with machinery, putting them at serious risk of rollovers or ATV accidents. The NAS suggests educating children about peers who have experi-

enced injury while performing risky activities.

### Ages 16-18

The last few years before your child becomes an adult are important to teach them to be a role model and crucial component to your farm's success. This is the age where clear and consistent rules about drugs and alcohol are imperative, as the responsibility they have on the farm is as important as they are dangerous.

# Buying New Equipment

**W**hen it's time to update the important machines that keep your farm running, it is easy to become daunted by the process. You will also be faced with several decisions pertaining to your specific situation.

## USED VS. NEW

If you need a machine that plays a key role in your everyday operations, it is a good idea to consider both used and new options.

Although you can never be certain of the history of someone else's equipment, you can find local professionals to inspect your potential machinery before you agree to buy it.

New equipment typically comes equipped with a warranty and support from the manufacturer. When the time comes to buy, make sure you have considered all of your options. Weigh factors like cost, quality and longevity of the equipment before adding it to your farm.

## BUY OR LEASE?

When it comes to how you obtain your new equipment, there are a couple different ways to go about it. Each type



offers its own unique advantages and disadvantages.

## WHY BUY?

Whether you finance or pay outright for new machinery, when you buy, it's yours. A benefit is that the equipment itself and the labor, insurance, repair and fuel costs used to maintain it are all tax deductible.

The major downside of buying equipment is you are

responsible for the maintenance and repairs that are required to keep it moving.

Some sellers may offer a rollover option which ensures farmers can upgrade their equipment according to a determined time period by using it as a trade in for a newer option.

## IS LEASING RIGHT FOR YOU?

By leasing, farmers can

usually make lower payments for their machines. This leaves plenty of room in the budget for even more equipment that may not have been possible with a hefty debt towards buying a new machine.

Leasers can also return equipment once it has served its purpose for the season. It is a way to avoid paying for equipment during the dormant months of farming. Not

having to cover costs of machinery that isn't even being used gives you more income to put towards other aspects of your operation.

A negative part of the leasing process is there are not as many tax breaks. Payments can be reported as ordinary expenses which are deductible, but in order for equipment to make the depreciation schedule, a purchase must be made.

# New Farming Technology

The farming industry has been a huge beneficiary of the technology boom of the modern era. Farmers can strengthen their crops, connect them to incredible sensors and even inspect the entirety of their property from the comfort of their couch.

Running a successful farm is a time-consuming career that requires hard work, patience and a little luck. When you take advantage of cutting-edge technology, doing the job efficiently becomes simpler.

## CONNECTED CROPS

Modern technology has a trend of connecting everything to the Internet – now you can connect your crops. The United States Department of Agriculture’s research agency, the Agricultural Research Service, has developed innovative soil, water and plant-stress sensors to automatically irrigate fields only when necessary.

The agency suggests these sensors be mounted on pipelines of above-ground commercial irrigation systems. They can trigger irrigation equipment based on soil-water content.

According to the Natural Resource Conservation Service, a large irrigation system consisting of pumps and permanent piping can cost up to \$2,500 an acre to sufficiently water. Using these sensors will guarantee the expensive process doesn’t waste a drop.

## EYES ON THE SKY

When used by farmers to



analyze their property, drones can be the easiest and affordable ways to utilize data-driven farming.

The benefits from using a drone extend far beyond monitoring the furthest lines of your property for signs of trespassing and structure integrity. Because they are so easy to send on a flight, farm-

ers can use them to build a time-series animation of their field’s growing performance.

It is easy to see where adjustments must be made for next growing season. When searching for a drone, ask your local electronics professional about included infrared cameras. Analyzing pictures in this filter can easi-

ly show distressed plants that may be difficult to see with conventional photography.

## SMART FARMING

Perhaps you don’t consider your farm large enough to need assistance from self-driving tractors or “robot farmers” employed to travel the narrow rows between

plants and harvest their product.

However, any farmer can benefit from taking advantage of modern technology meant to make their job easier and their crops heartier. Conduct some research on your own to identify technology solutions that may make your life easier on the farm.

# Ethically Raising Livestock

**U**nethical treatment of farm animals has crippled many farms and ranches while opening the eyes of Americans who refuse to support such operations.

When committing to raise livestock ethically you benefit consumers, the planet and the animals themselves.

Non-profit organizations like Humane Farm Animal Care aim to improve the lives of farm animals by demanding kinder and more responsible farm animal practices. With their help, more consumers are becoming aware of outdated farm practices and demanding ethical approaches to raising livestock.

Take a look at the different benefits you provide when raising livestock responsibly, as reported by the Ethical Farming Fund.

## **BENEFITS FOR HUMAN HEALTH**

Pasture-raised livestock provide healthier meat, dairy and eggs. The food they produce is generally lower in fat, calories and cholesterol than industrially produced meat. You will also offer meat much higher in these important nutrients:

- Omega-3s
- Vitamin A



- Vitamin E
- Conjugated Linoleic Acid

Pasture farms also don't treat animals with growth hormones, which are causing alarming problems in human health.

## **BETTER FOR THE ANIMALS**

Typically, industrial-livestock systems work to push as many animals to market weight without spending too

much revenue. These are known as CAFOs, or concentrated animal feeding operations.

Conditions for the health of livestock is often a second thought to turning a profit.

When ethically farming, animals are free to behave as they wish with plenty of space to move freely. This freedom allows them to consume the healthy ingredients found in their natural diets, which

enables them to live healthy and comfortable.

## **BETTER FOR THE ENVIRONMENT**

Raising livestock responsibly helps farmers do their parts in promoting limited damage to the environment. Ethical farms typically market locally, which is great for reducing the fossil fuels needed for transporting their meat.

The EFF states that pas-

ture-based farms are environmentally beneficial because they mimic nature. A few ways this is obtained are:

- They rely on perennial plants and grasses, which nourish the soil.
- By limiting pollution caused by disposing of animal waste, as it is welcomed into the ecosystem naturally.
- Are less invasive to wildlife habitats than feedlots corn-fields.